



ATTORNEY DOCKET NO. 25636-705

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application

Inventor(s): Zhu, L. et al.

Application No.: 09/703,399

Filed: October 31, 2000

Title: ASSEMBLY AND SCREENING OF HIGHLY
COMPLEX AND FULLY HUMAN ANTIBODY
REPERTOIRE IN YEAST

) PATENT APPLICATION

) Art Unit: 1627

) Examiner: Friend, T

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AMENDMENT IN RESPONSE TO

NOTICE TO COMPLY WITH SEQUENCE LISTING REQUIREMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Applicants submit this Amendment in response to the Examiner's Office
Communication mailed November 4, 2002 requesting that the above-referenced application
comply with Requirement for Nucleotide Sequence and/or Amino Acid Sequence Disclosures.

Please amend the above-referenced application as follows:

IN THE SPECIFICATION:

Please replace the paragraph beginning at page 2, line 20, with the following rewritten
paragraph:

--The V_L and V_H portions of a monoclonal antibody have also been linked by a synthetic
linker to form a single chain protein (scFv) which retains the same specificity and affinity for the
antigen as the monoclonal antibody itself. Bird, R. E., et al. (1988) "Single-chain antigen-binding
proteins" Science 242:423-426. A typical scFv is a recombinant polypeptide composed of a V_L
tethered to a V_H by a designed peptide, such as (Gly₄-Ser)₃ (SEQ ID NO: 80), that links the
carboxyl terminus of the V_L to the amino terminus of the V_H sequence. The construction of the
DNA sequence encoding a scFv can be achieved by using a universal primer encoding the (Gly₄-
Ser)₃ linker by polymerase chain reactions (PCR). Lake, D. F., et al. (1995) "Generation of
diverse single-chain proteins using a universal (Gly₄-Ser)₃ (SEQ ID NO: 80) encoding
oligonucleotide" Biotechniques 19:700-702.--

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